

Governor Scott Celebrates 2022 Maple Season and 75th Anniversary at Proctor Maple Research Center

By Scott Waterman, VT Agency of Agriculture, Food & Markets

Framed by the Green Mountains blanketed in winter snow and the maple wood of Underhill, Governor Phil Scott kicked off the 2022 Vermont Maple Season by tapping the unofficial “first” maple tree at the University of Vermont Proctor Maple Research Center (PMRC).

While Vermont’s maple industry is celebrated for its world-renowned quality, taste and nationwide leading annual production, the event also celebrated the important contributions of the Underhill facility to Vermont’s maple producers over the past 75 years. From growing the ability to tap trees and boil maple sap utilizing



leading-edge technology to studying the potential impacts of climate change on the state’s maple trees, the Research Center is widely

recognized in the industry as playing an important role in the cultural growth and economic importance of the traditional agricultural crop.

Mark Isselhardt, UVM Extension and Governor Scott prepare to tap the first maple.

“Our maple industry leads the nation, supports our economy and strengthens the Vermont brand, while the Proctor Maple Research Center at UVM reinforces that,” said Governor Scott. “With the strong brand recognition of Vermont Maple comes a responsibility to keep our standards at the highest level, and our maple producers have been doing that for decades with the help of the Proctor Maple Research Center.”

Established in 1947, PMRC is renowned as an international leader in basic and applied research on

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AGRiVIEW

Vermont Agency of Agriculture, Food & Markets

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THE VIEW FROM 116 STATE STREET

Vermont's dairy economy is crucial to the future of the Green Mountain State. Dairy contributes two billion dollars each year. We need to build upon that economy that is so critical to Vermont's rural regions.

One indicator, the price of milk paid to farmers, is increasing at this time (although higher milk prices are offset by more expensive fuel, fertilizer, and other inputs). While the price of milk is good news, the dairy sector will face challenges in the coming months until inflation and supply chain issues return to a point of stability.

Vermont received new dollars to help the dairy industry. The US Department of Agriculture committed \$20 million to the Northeast Dairy Business Innovation Center located in Montpelier and

managed by the Vermont Agency of Agriculture, Food & Markets. A task force led by the Agency and several partners in the Northeast helped create opportunity for this new infusion of dollars. In early March, USDA Under Secretary Jenny Moffitt toured Vermont, visiting with farmers in connection with that announcement. We are grateful for Moffitt's time, learning and listening from Vermont farmers. The Dairy Business Innovation Center will be an important catalyst in the coming months as we continue to address issues including processing, transportation, on farm infrastructure and marketing.

The same week, there was a positive development in the setback that some organic milk producers suffered six months ago when Horizon Organic announced they were going to pull out of Vermont and parts of the Northeast. Dozens of farmers in Vermont, New York, Maine, and New Hampshire were left scrambling to find a new buyer for their milk. A farmer-focused task force, under the direction of

USDA Secretary Vilsack and his team, identified many key issues facing dairy. Stimulated by the Horizon issue, this comprehensive report addressed processing capacity, transportation, infrastructure needs on the farm and the need for more technical assistance.

As that work was underway Agency advocates continued to work with potential new milk buyers for farmers who sell their milk to Horizon. Those buyers, including Stonyfield and Organic Valley, visited, and talked with the farmers who were faced with losing their markets. A ray of hope came in mid-March when Organic Valley announced that they are prepared to offer contracts to 80 farmers, a majority of those who ship their milk to Horizon:

We are the only national brand still fighting for small family farms

because we know that the best quality food is ethically sourced from small family farms. With the help of consumers and customers across the country, we are helping solve the crisis of disappearing small family farms. We are creating the food system we all want—one that regenerates soil, cares for animals, nourishes people, and strengthens communities.

— Bob Kirchoff,
Organic Valley CEO

Between milk prices and world crisis, continued funding for the Dairy Innovation Center, and good news from Organic Valley, it's been a busy few weeks for Vermont dairy. We are grateful for all those who stepped forward to help. Please feel free to be in touch with ideas to stimulate Vermont's dairy economy into the future.

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2022 Maple Season

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maple trees and maple production. Throughout its history, UVM maple scientists have worked in the lab, the sugarhouse and around the state to understand the issues facing maple producers and help advance the science to solve them.

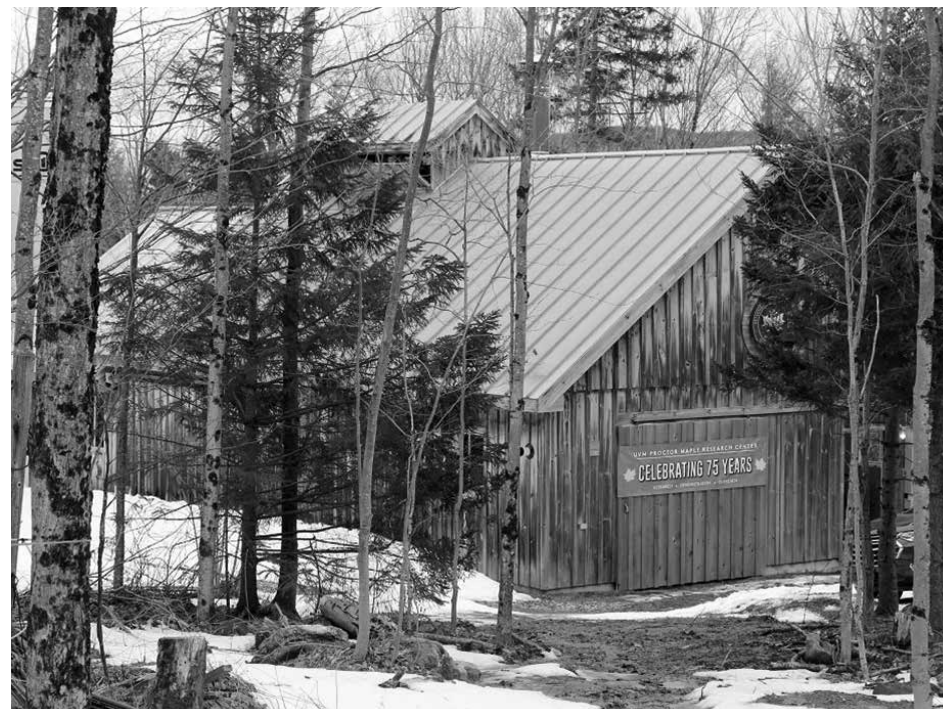
"We are proud of our long history in maple research, demonstration and outreach at the University of Vermont and pioneering contributions of UVM maple scientists," said Leslie Parise, dean of the UVM College of Agriculture and Life Sciences, home to PMRC. "We look forward to continuing to better understand the most pressing issues facing Vermont maple producers and advancing the science to address them."

"Vermont continues to lead the nation in maple syrup production, with nearly half of the country's maple syrup coming from our state's family farms," Vermont Agency

of Agriculture, Food and Markets Secretary Anson Tebbetts said.

"Vermont Maple has expanded its reach past pancakes and waffles. We are seeing it infused in barbeque sauces, hot sauces, spirits and beers, and is even considered a healthy alternative to cane sugar

as a natural sweetener," said Cory Ayotte, Communications Director of the Vermont Maple Sugar Makers Association. "Vermont's sugar makers continue to produce the most maple syrup in the United States and have more than doubled their tap count since 2008."



USDA Announces \$20 Million Funding to Northeast Dairy Business Innovation Center for Dairy Improvement Grants

By Scott Waterman, VT Agency of Agriculture, Food & Markets

The Vermont Agency of Agriculture, Food and Markets (VAAFM) is excited to announce a new fund from the U.S. Department of Agriculture (USDA) augmenting the Northeast Dairy Business Innovation Center (NE-DBIC) and the region's dairy businesses. Vermont's and our regions dairies will now have the opportunity to submit additional proposals for up to \$20 million in American Rescue Plan funds to further support processing capacity expansion, on-farm improvements, and technical assistance to producers as part of an additional overall investment of \$80 million in the Dairy Business Innovation (DBI) Initiatives from USDA.

"These resources will help those who make their living off the land," Vermont Governor Phil Scott said. "Dairy farmers are the backbone of our rural economy, and these dollars will provide much needed support for our hard-working dairy farmers who are feeding us. We thank Secretary Vilsack and his team at USDA and our Congressional delegation for their leadership and their commitment to Vermont Agriculture."

In November 2021, DBI awarded \$18.4 million to three current Initiatives at University of Tennessee, the Vermont Agency of Agriculture, Food and Markets and University of Wisconsin, and \$1.8 million to a new initiative at California State University Fresno. Under the existing DBI program, which was previously announced through a FY21 Request for Applications (RFA), each Initiative will now have

the opportunity to submit additional proposals for up to \$20 million in American Rescue Plan funds to further support processing capacity expansion, on-farm improvements, and technical assistance to producers.

"This allocation of \$20 million dollars to the Northeast Dairy Business Innovation Center (NE-DBIC) at the Vermont Agency of Agriculture is great news for dairy farmers," Vermont Agriculture Secretary Anson Tebbetts said. "These funds will help build more markets for family farms, improve dairy processing, create new dairy products and make it more affordable for farmers while growing their businesses. We thank USDA and Secretary Vilsack for their leadership on this important issue for Vermonters and the Northeast."

Since its inception in 2019, DBI initiatives have provided valuable technical assistance and sub-grants to dairy farmers and businesses across their regions, assisting them with business plan development, marketing and branding, as well as, increasing access to innovative production and processing techniques to support the development of value-added products. Separate from this supplemental ARP funding, AMS plans to announce a new DBI Request for Applications later in FY22 contingent upon appropriations.

Laura Ginsburg, the Northeast Dairy Business Innovation Center lead, said the funds come at a critical time for our region's organic dairies. "The additional funding provided by the USDA is a catalytic investment in our regional dairy system and will allow us to support farmers who have lost their market while

also investing funds into the dairy supply chain," Ginsburg said. "The Northeast Dairy Business Innovation Center is built around regional collaboration and we look forward to working with our partners in other states to develop the highest and best use of this money. Using the forward thinking approach the NE-DBIC brings to all opportunities, we will work to ensure that we are not just solving the problems of the present moment but positioning our region for a stronger and more resilient future."

USDA Undersecretary Jenny Lester Moffitt visited Vermont and held a press conference in Montpelier on March 3 to discuss this news and her visit alongside VAAFM Secretary Anson Tebbetts. To view a recording of the press conference visit the Vermont Agency of Agriculture, Food and Markets' Facebook page.

For more information about the Northeast Dairy Business Innovation Center, please visit: <https://agriculture.vermont.gov/dbic>

Agribusinesses May Book Free Financial Consultations

By UVM Extension

Registration is now open for the 2022 Business Coaching Sessions, offered by University of Vermont (UVM) Extension for Vermont farm, forest and maple businesses.

Extension business experts are available for free, individual consultations to provide financial guidance and business planning. Sessions are tailored to the needs of the farm or business and may be used for help with budgets and business plans, preparation of balance sheets, review of business goals including marketing and strategic planning and other financial questions.

Consultations are 90 minutes and will take place primarily through video conferencing or telephone. Times must be reserved no later than Thursday of the week prior to the desired slot to ensure adequate preparation.

To register, go at <http://go.uvm.edu/agbizcoaching> Once registered, individuals will be contacted to make arrangements for their appointment.

Sessions may be booked with the following UVM Extension specialists:

Chris Lindgren (forest and maple): Mondays, March 21-July 25, 12:30 or 3 p.m.; Fridays, March 25-May 20, 9:30 a.m. and Wednesdays, March 23-May 11, 1 p.m. Note that the Wednesday sessions will be in-person at the UVM Extension office in Brattleboro.

Betsy Miller (farm): Thursdays or Fridays, March 2-May 11, 10 a.m. or 1 p.m.

Zac Smith (digital marketing and farm): March 3-April 22, Wednesdays or Fridays, 10 a.m. or 3 p.m.

If requiring a disability-related accommodation to participate, please contact Christi Sherlock at (866) 860-1382, ext. 200, three weeks prior to the scheduled appointment.

DAIRY BUSINESS INNOVATION CENTER

Dairy Grazing Technical Assistance Cohorts Underway

By Ollie Cultrara, VT
Agency of Agriculture, Food & Markets

Dozens of Northeast region dairy farmers are receiving support in developing grazing management systems thanks to a creative model of cohort-based technical assistance funded by the Northeast Dairy Business Innovation Center (NE-DBIC). Since 2020, the NE-DBIC has contracted with technical service providers to recruit localized groups of dairy farmers in five states. The cohort-based approach is designed to help farmers build grazing knowledge and skills through a combination of direct one-on-one support and peer networking.

The contractors provide on-farm group and individual business and technical assistance over a period of 18 to 24 months to help the farmers transition to a grazing model, improve home-grown forage production, or implement alternative farm management systems. Each farmer works with the service provider to develop a two-to-five-year transition and management plan. Once a plan is developed, participating farms are eligible for NE-DBIC grants to help with the costs of implementing improvements, such as fencing supplies, water system improvements, or

grass and forage testing.

Cohorts currently underway

University of Vermont Extension Grazing Outreach Professional Cheryl Cesario is working with five certified small farms in Addison and Rutland Counties. The farmers are considering or actively transitioning to managed grazing to reduce feed costs, improve animal health, and enhance conservation practices.

Pennsylvania Association for Sustainable Agriculture is assisting 13 farmers in two cohorts in southern Pennsylvania and central-western New York. The project aims to fill a gap in grazing resources for new dairy farmers by working

with current apprentices and recent graduates of the national Dairy Grazing Apprenticeship program.

White River Natural Resources Conservation District is coordinating two cohorts to provide technical assistance for 13 farms located in the Connecticut River watershed in Vermont and New Hampshire. The farmers are transitioning to a grazing production model as well as developing individualized Certified Whole Farm Conservation Plans.

Cohorts launching in 2022

University of Vermont Extension will organize cohorts to provide technical assistance for 10 to 12 dairy farmers in Vermont

and New York focusing on improving the farmers' production of high-quality forages using a holistic, whole farm approach.

Cooperative Regions of Organic Producer Pools, whose member farmers sell dairy products under the Organic Valley label, will support at least 35 certified organic, pasture-based dairy farmers in Maine, New York, and Pennsylvania. Technical assistance will address topics including grazing, forage management, grass-based production systems, silvopasture/agroforestry, alternative manure management, and farm financials management.

Conservation Performance LLC will recruit farmers and farm financial experts across the region to participate in research and training regarding "low-overhead grazing," a dairy production model that

prioritizes investments in cows and grazing rather than machinery and buildings.

Cornell Cooperative Extension will recruit at least 10 certified organic dairy farmers in central and eastern New York for technical assistance cohorts to address grazing, nutrition, healthcare, and other topics of interest to participating farmers.

Additional cohorts will launch later this year through an additional round of contracts focused on helping farmers move along the continuum of grazing, enhance home-grown forage production, and explore alternative farm management strategies.

For more information, visit agriculture.vermont.gov/transition-grazing-cohort-ta-contract or contact Kathryn Donovan at kathryn.donovan@vermont.gov



Dairy farmers in the White River Natural Resources Conservation District's transition to grazing cohort participating in an on-farm learning day.

2022 Vermont Dairy Update

As you know, the coronavirus pandemic led to the cancellation of the 2022 Vermont Farm Show. Of course this also precluded the traditional Dairy Update meeting which is normally held during the Farm Show. As a substitute, Diane Bothfeld and her team brought the meeting to the virtual world, holding the Dairy Update online.

This year, the Dairy Update was broken into two virtual presentations, one on February 10th and the second on February 16th. In case you missed it, you can find the video recordings and copies of the presentations on the Agency's website: <https://agriculture.vermont.gov/administration/2022-vermont-dairy-update>

Dairy Marketing & Branding Services Grant

By Ollie Cultrara, VT Agency of Agriculture, Food & Markets

In mid-April, the Northeast Dairy Business Innovation Center will launch a second round of the Dairy Marketing & Branding Services Grant. These grants support value-added dairy processors to contract with professional marketing firms to develop marketing tactics, brand improvements, and overall strategy to elevate their businesses. Up to 25% of the grant funds may be used to implement the strategy or content developed by the contractor.

Projects funded by this grant will increase the exposure and promotion of regionally produced dairy products guided by marketing/branding professionals. Established dairy processors based in Vermont and the Northeast region that transform raw milk into an edible product with regionally sourced milk are eligible to apply.

Awards will range from \$10,000 to \$50,000 with a 25% cash or in-kind match requirement. A total of \$400,000 in funds is available in this grant round. To learn more, visit agriculture.vermont.gov/dbic/activities/dairy-marketing-branding-services-grant or contact Brockton Corbett at brockton.corbett@vermont.gov or 802-498-5111.



Last Chance: Multi-Business Dairy Agritourism Grant Closes April 7

By Ollie Cultrara, VT Agency of Agriculture, Food & Markets

The Northeast Dairy Business Innovation Center is accepting applications through the Multi-Business Dairy Agritourism Grant Program until April 7. This funding supports collaborative agritourism activities designed to raise awareness and consumption of the region's dairy products. Dairy producers, processors, and producer associations in Vermont and the Northeast are eligible to apply. Awards will range from \$10,000 to \$25,000 with a 25% cash or in-kind match requirement.

Learn more at agriculture.vermont.gov/dbic/activities/multi-business-dairy-agritourism-grant or contact Brockton Corbett at brockton.corbett@vermont.gov or 802-498-5111.

Conservation Practice Adoption Results in Regulatory Compliance and Added Farm Value

By Orleans County Natural Resources Conservation District (NRCD)

Orleans County NRCD and its partners strive to work with farmers to improve farm management practices and water quality using Best Management Practices (BMPs) in the Lake Memphremagog Watershed, a lake that exceeds phosphorus water quality standards by 26 percent. A land use export model developed by the Vermont Department of Environmental Conservation and partners in Quebec identified agriculture as a major contributor to phosphorus in this watershed.

Considering the area's water quality challenges, the Jones Family Farm of Craftsbury, located within the Black River Watershed, partnered with Orleans County NRCD in 2016 to seek regulatory compliance and a reduction of nonpoint source pollutants into the river.

By identifying farm goals and objectives, assessing the natural resources, prioritizing soil and water quality projects, and participating in the Orleans County NRCD water quality monitoring program, the Jones family hoped to comply with Vermont's newly enacted Required Agricultural



Practices (RAPs).

The farm's conservation efforts included an RAP-compliant Nutrient Management Plan, new heifer manure storage and barnyard, increased vegetative buffer along a stream, livestock exclusion fencing, cover crop and no-till practices, and three years of water quality monitoring below and above the stream. Together, these practices have been shown to abet reduction of runoff and improve soil health and water quality.

Jim Jones, who manages the farm with his daughter Nicole, has found that "there is a lot of added unknown benefit to the projects. Like the new manure storage has made it easier for rounding up and handling cattle." He believes compliance and implementation of conservation practices will help the farm in the future. "This work has added value to the farm and will help the next generation in the long run," he said.

A consistency in water

quality data throughout the three years of sampling showed that conservation practices were effectively reducing non-point source pollution. With this success, efforts shifted to the heifer manure storage and barnyard project work area. While this project fell outside of the sampling site, these best management practices have long produced phosphorus reduction and are a big step toward improving the Black River Watershed's overall health.

For Jim, participating in the water sampling program was a little scary at first, but Jones concluded that "if it is bad, I want to know and I want to do something about it. I knew that NRCD and NRCS conservation planners are here to help and work together to fix it. Orleans County NRCD staff stuck with us through the planning and implementing projects, they keep coming back, and have the willingness to listen to what we want and tweak things to make it work for us and for conservation."

VERMONT AGRICULTURE & FOOD SYSTEM PLAN 2021 – 2030:

Labor and Workforce

Editor's note: This brief is part of the Vermont Agriculture & Food System Plan 2021-2030 submitted to the legislature in January 2021. To read the full plan, please go to <https://agriculture.vermont.gov/document/vermont-agriculture-and-food-system-strategic-plan-2021-2030>



NOTE: This brief reflects conditions before the economic crisis brought on by the COVID-19 pandemic.

This brief was prepared by:
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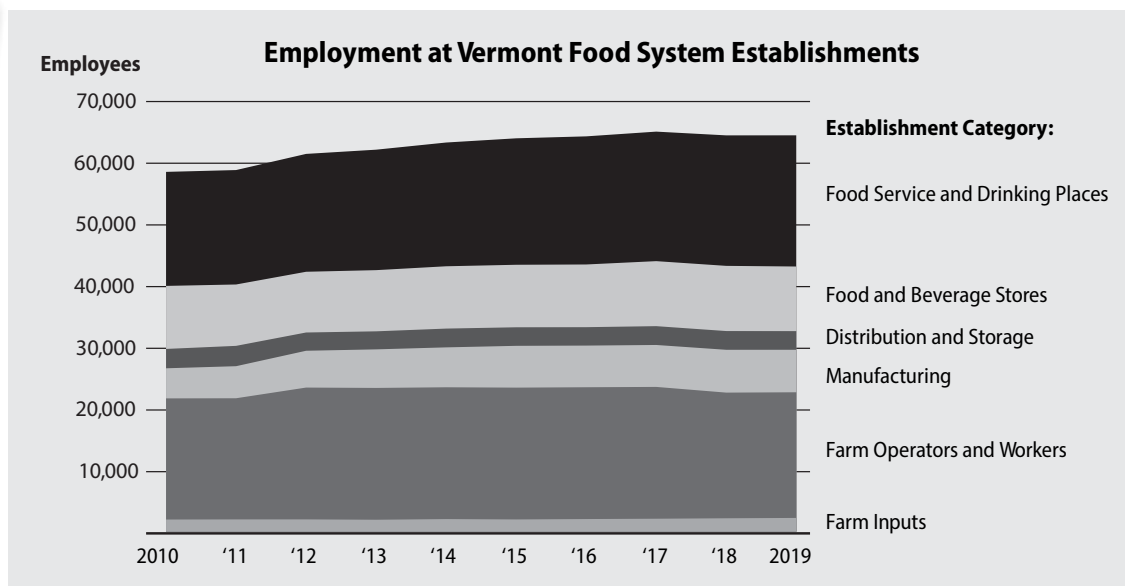
What's At Stake?

Vermont's farm and food economy gained 742 net new businesses between 2010-2017, and economic output expanded 48% from \$7.5 billion to \$11.3 billion between 2007-2017. Despite this growth, these businesses are affected by the workforce shortage impacting all sectors in Vermont, and many report that a lack of employees with the required skills is holding back their production and planned growth. In order to sustain the expansion of Vermont's agricultural economy, existing workforce

solutions must be adapted for the unique needs of farms and food system businesses. Simultaneously, despite the overall workforce shortage in the state, individuals living in Vermont often have difficulty finding careers that provide a livable wage and need greater access to training and employment resources. Preserving the local food system as a viable economic driver requires workforce solutions that benefit both employees and employers.

Current Conditions

Vermont's declining population and low unemployment rate result in heightened competition for available workers, especially those with mid-level management experience or specific high-demand technical skills. At the same time, potential employees may be interested in certain jobs but unable to accept them if the wages are too low relative to Vermont's cost of living and/or their debt burden from student loans.



Vermont's workforce shortage severely limits the viability and growth of businesses of all sizes. Many food system businesses report that a lack of employees is holding their businesses back. In some cases, businesses are able to find employees, but high turnover rates increase training expenses and reduce productivity.

Food system businesses compete with businesses in other sectors for their workforce needs and are often at a disadvantage. Farms, and many other food

system businesses, typically have at least some seasonal positions, which present a disadvantage in attracting employees compared to year-round work. Most farms are located away from population centers, creating a serious barrier for jobseekers who cannot afford their own vehicle, and a deterrent even for those who can. Where public transportation does exist, it is often based on the nine-to-five workday and does not operate during hours appropriate for food system workplaces such as farms, bakeries, and restaurants.

Employers and educators report a mismatch between food system job duties and prevailing cultural beliefs about what makes a good career. Many job seekers are inexperienced or unenthusiastic about the manual labor required on farms and in many other food system workplaces. There

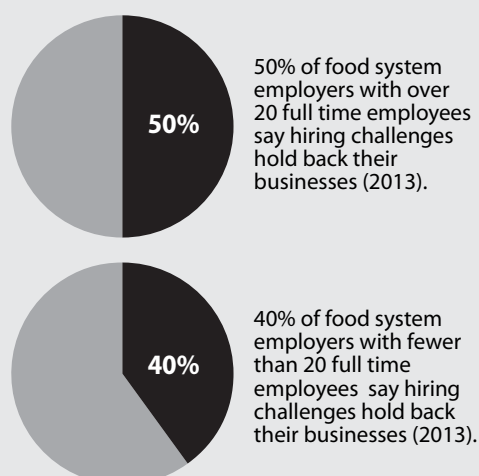
is also a shortage of basic work readiness skills in the Vermont workforce, impacting employers in all sectors. And many food system positions require technical skills that few potential employees possess (e.g., food safety quality assurance) or that potential employees do not associate with food system careers (e.g., commercial driver's license).

Meeting Employer Needs

Current Conditions

While many businesses are engaged in long-term workforce development efforts, they also need immediate solutions. Short-term approaches include competing against other businesses more effectively, addressing the logistical barriers that prevent potential employees from accepting employment, and accessing a variety of labor pools, including immigrant labor. An estimated 1,000-1,200

Labor Shortages in the Vermont Food System





immigrants (documented and undocumented) and 425 people on H-2A visas (which can only be issued if the employer is unable to find local workers) currently perform a significant portion of agricultural work in the state, both seasonally and year-round.

Bottlenecks & Gaps

- Food system businesses are often unable to compete against the wages and benefits offered in other sectors.
- Many of the existing logistical solutions available to Vermont employers are difficult or inefficient with a small number of employees (e.g., company vanpools).
- There is increasing in-state and national competition for established H-2A farm workers, who are also aging out of the workforce and not being replaced by younger applicants.
- Workforce-sharing with businesses with opposite seasonality holds promise (e.g., ski resorts), but some seasonal sectors overlap with agricultural needs in the spring and fall (e.g., education).
- Vermont has a large and active workforce development service provider network, but many of these professionals are not fully aware of the specific concerns and solutions applicable to food system businesses, especially farms.

Opportunities

- Food system businesses have a tradition of collaboration, which they are already leveraging to address workforce challenges. Trade associations could

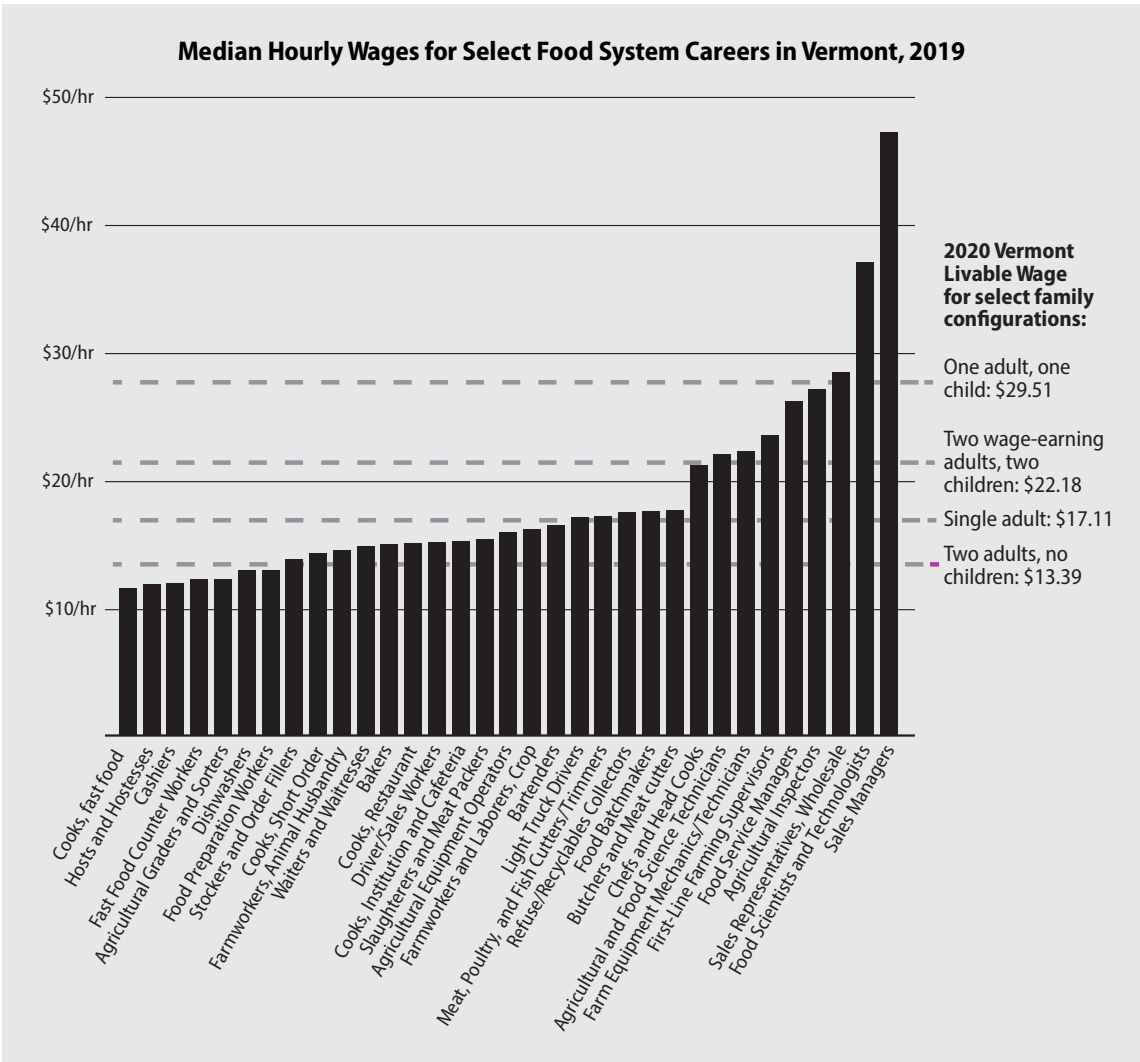
play a role in increasing awareness of food system careers as well as implementing logistical solutions.

- Many food system jobs require technical skills that are not food-specific (e.g., HVAC installation). Strategic outreach to workers in related sectors could reach new pools of employees, and it may be feasible to collaborate or seasonally job-share with businesses in other sectors.
- Employers may be able to help when potential employees face logistical barriers to work, for example by providing vanpools or creating work shifts which consider school schedules.
- There are promising state and local efforts to reach marginalized and overlooked local labor pools, including formerly incarcerated Vermont residents, individuals with disabilities, and retirees interested in returning to work.

Wages and Workplace Conditions

Current Conditions

Offering competitive wages, benefits, and/or “quality-of-life benefits” are the most effective ways food sector businesses can attract and retain employees. Like all businesses in a tight labor market, in order to successfully compete for employees they cannot rely on offering the legal minimum wage but must instead offer the “prevailing minimum wage,” matching the wages offered by national chains and by other comparable sectors. As in any sector, intangible



workplace conditions like a welcoming atmosphere can be a selling point or a breaking point; employers with poor interpersonal skills may be especially hard-pressed to find employees. Farm and food businesses also operate under specific labor laws which in some ways are beneficial to the business but in other ways restrict their flexibility or negatively impact their employees (see Poultry brief, Meat Slaughter, Processing, and Products brief.)

Bottlenecks & Gaps

- Low wages and unhealthy or unpleasant workplace conditions are frequently identified as a severe problem in the restaurant industry and in agriculture. These may be especially experienced by disadvantaged groups including racial minorities (see Racial Equity in the

Vermont Food System brief), undocumented immigrants, individuals with disabilities, and women.

- The high costs of housing, transportation, health care, and child care, and the prevalence of student debt, increase the “livable wage” that a potential employee needs to receive.
- Many food system businesses have a slim profit margin and cannot raise prices while remaining competitive. This hinders their ability to raise wages and attract employees.
- Enforcing fair labor standards in U.S. agriculture, in particular, is complicated by the exemptions from labor law that farms receive, because undocumented immigrant workers have less social support, resources, and legal recourse than

documented workers, and by structural racism.

Opportunities

- There are Vermont businesses which factor the cost of employee turnover into their financial planning and are thus able to provide higher wages and/or benefits (e.g., paid sick days).
- There are Vermont farms which attract and retain workers by offering creative benefits, including free or discounted food, access to training and career development, or allowing employees to have an independent enterprise of their own on the farm property.
- Farm and food business viability assistance could include coaching on ways to increase wages and become much more competitive as an

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FARM FEATURE

Grabowski Farm

By Ollie Cultrara, VT Agency of Agriculture, Food and Markets

Farmers often devise creative solutions and methods to fit their unique operations. In this series, the Produce Program at the Vermont Agency of Agriculture, Food & Markets features practices that Vermont fruit and vegetable growers use to enhance food safety, increase efficiency, protect product quality, and improve employee satisfaction. This month, we're featuring Grabowski Farm, a family-owned and operated dairy farm and sweet corn stand in West Rutland, Vermont.

Sweet corn harvest technique

Grabowski Farm uses a simple, custom container setup to harvest sweet corn. Using nylon cable ties, they



Plastic crates used to harvest sweet corn at Grabowski Farm in West Rutland.

attach two plastic crates, one facing up and one facing down. (The bottoms get zip tied together.) The lower crate acts as a platform to keep the top container elevated off the ground. The harvesters move the

stacked crates along the row and pick corn into the top, upright crate. Once they are filled with vegetables, the harvesters dump them out into a truck bed that has been sprayed out and sanitized.

Tip: plastic crates are often available in stores at the end of summer because they are popular for students.

Why it works

The farmers note several benefits to this setup. The crates are inexpensive, lightweight, and hold just the right amount of corn, so they are not too heavy when filled up. Because the base is mostly open, they do not collect much dirt. They are easy to clear of debris, scrub with detergent, rinse clean, and sanitize.

Importantly, this approach keeps the container holding the produce off the ground. Soil can be a source of foodborne pathogens, like *E. coli* or *Salmonella* bacteria, so it's a good practice to prevent harvested crops from contacting the soil. This arrangement also keeps the crate at a more ergonomic height for

harvesting standing up than a single container placed directly on the ground.

Taking the next step

This technique may also work to harvest trellised or staked crops such as tomatoes or cucumbers. A variation on this theme is keeping waxed corrugated boxes off the ground when field-packing. West Farm in Cambridge, VT places a waxed cardboard box inside a durable plastic fish tote. The tote can then be placed or dragged in between rows while crops such as greens are packed into the wax box. The tote prevents soil and debris from sticking to or entering the bottom of the wax box.

For more information about on-farm food safety and resources for fruit and vegetable growers, visit agriculture.vermont.gov/produceprogram.

Celebrating a Maple Milestone

75 years of research, education, and outreach at the UVM Proctor Maple Research Center

By Rachel Leslie, University of Vermont

As the sap flows around the state, the University of Vermont is celebrating the 75th sugaring season at the Proctor Maple Research Center, or PMRC, in Underhill, VT. For three quarters of a century, the center has been at the cutting-edge of maple

research and served as a model facility for the maple industry.

"Seventy-five years ago, some of the fundamental questions Proctor researchers were asking were about why and how sap flows in maple trees. We've learned a lot but we still don't fully understand all the mysteries of maple," said Tim Perkins, UVM research professor and PMRC director.

Established in 1947 as the first permanent maple research facility in the country by Vermont Governor Mortimer Proctor, PMRC is renowned as an international leader in basic and applied research on maple trees and maple production. Throughout its history, UVM maple scientists have worked in the lab, the sugarhouse and around the state to understand the issues facing

maple producers and help advance the science to solve them. Their contributions - from understanding the physiology of maple trees to assessing the impact of modern processing technologies - have been invaluable to the industry and helped Vermont become the top producing maple state in the country.

"The Proctor Maple Research Center just stands out as a partner that has

helped Vermont maintain our reputation as having the world's best maple syrup," said Sam Cutting IV, president of Dakin Farm. "It's not just a classroom or a lab up in the mountains. It is an incredible partner and always has been."

One of PMRC's defining features is that its researchers are sugarmakers themselves. In a typical year, PMRC produces about 3,000 gallons of syrup which is served in UVM campus dining halls and sold through a packer around the state. The center's three-pronged approach -

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April Showers Bring More Flowers to Morey Hill Farm After Working Lands Business Grant

By Clare Salerno, VT Agency of Agriculture, Food and Markets

As the second long pandemic winter gives way to mud season, sometimes it can be hard to imagine that spring and summer flowers will ever bloom. The pandemic at times doubled prices in the global flower supply chain, but local farms have stepped up to provide bright blossoms during such gloomy times. Thanks to a \$19,400 Working Lands Enterprise Initiative Standard Business grant in 2020, Morey Hill Farm in Craftsbury has doubled their flower production to meet the increased demand.

With the Working Lands grant, Morey Hill Farm installed a subterranean cool storage facility. The new building led to much larger capacity to store flowers. With the additional storage space, Morey Hill doubled their floriculture acreage in production, floral output, wholesale florist accounts, and weekly sales in the 2021 season compared to 2020.

David Johnson and Hilary Maynard are looking forward to continued success in 2022 with their specialty cut flowers sold wholesale to designers, for weddings and events, and retail through a flower CSA and DIY wedding and event buckets. Starting in fall 2021, Morey Hill began storing all dahlia tubers for replanting and online sale in the new climate-controlled



Morey Hill Farm flower beds and washing and drying dahlia rootstock.

space. Storing plant material will enable the farm to replant rootstock in the fields the following year. Using their own local product minimizes costs and represents a quality alternative to other international and domestic products that can become very damaged during shipping process and potentially carry disease.

Through the installation

of the cool storage facility and expansion of their flower business, Morey Hill seeks to be a strong community partner in northern Vermont. Though the pandemic delayed the construction process for Morey Hill Farm's cool storage facility, commitment to logging and sawing wood materials from forests on the property helped mitigate



Construction of Morey Hill Farm's cool storage facility funded by the Working Lands Enterprise Fund.

further setbacks amid material price spikes of up to 60 percent and shipping delays associated with many construction projects.

In addition to sourcing local materials, Morey Hill Farm sought support from community partners. With the farm's focus on minimizing ecological impacts, they planned to design the facility with as much passive cooling as possible. After renting cooler space from Pete's Greens for the 2019 and 2020 seasons, David understood the optimal storage conditions for both rootstock and blooms. The growth in production and revenue also

allowed Morey Hill to hire one new full-time employee with plans to add a second full time employee this year. These efforts give life to the Working Lands Enterprise Initiative's goal to strengthen and grow the economies, cultures, and communities of Vermont's working landscape.

Visit <https://www.morey-hillfarm.com/> to learn more about what happens at Morey Hill Farm.

Working Lands Enterprise Initiative funding opportunities will re-open in fall 2022. Please visit workinglands.vermont.gov for more information.

Farm First, A Helping Hand

By Elizabeth Sipple, VT Agency of Agriculture, Food & Markets

Everyone on Earth experiences stress at one time or another. And with the converging crises of the COVID-19 pandemic, climate change, price insecurity, and changing markets it is no surprise that even

savvy and resourceful farm families may need some extra support. But you don't have to be alone with your problems! Farm First is a Vermont-based program focused on providing farmers and their families, with FREE support, resources, and information to reduce stress. The program is currently expanding to include farmworkers, as well.

If you are a farmer, farm worker, or family member who would appreciate support managing a financial, legal, relational, or mental health consideration you can reach Farm First at:

Call: 802-318-5538 during daytime work hours

Call: 877-493-6216 outside of daytime work hours

Email: Karen Crowley at karenc@farmfirst.org

About now you might be asking yourself: What will actually happen if I call Farm First? To understand the general process let's look at an example:

When Karen, a Vermont dairy farmer, called Farm First she was greeted by an agricultural resource coordinator. Karen explained to the coordinator that she

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VERMONT VEGETABLE AND BERRY NEWS



Compiled by Vern Grubinger,
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www.vvbga.org

Greenhouse Heater Maintenance

Chris Callahan, UVM
Extension Agricultural
Engineer

A checklist has been compiled posted, with images, at <http://go.uvm.edu/heatersafety> which also includes a video checklist on this topic, by John Wells of Rimol Greenhouses. You can find the video on this YouTube link <https://www.youtube.com/watch?v=GAmuyx92uBQ>

More Resources From The UVM Extension Ag Engineering Team

Seasonally Relevant Resources

Heat Load Estimation for Greenhouses and Tunnels: <http://go.uvm.edu/green-househeatload>
Greenhouse and High Tunnel Ventilation: <http://go.uvm.edu/tunnelventilation>
Getting Started with Germination Chambers: <http://go.uvm.edu/growth-chambers>

New Blog posts

Patient Pursuit of Packshed Happiness at Ananda Gardens: <https://go.uvm.edu/anandagardens>

[edu/anandagardens](https://go.uvm.edu/anandagardens)
Washing Machine/Greens Spinner Conversion Guide: <https://go.uvm.edu/generalspinnerguide>

New Podcasts Episodes at <https://agengpodcast.com>

Checking Out Old Equipment at High Meadows Farm: EP63
Checking out New Equipment at High Meadows Farm: EP64
Rain-flo Plastic Mulch Layer: EP65

New Guide On Tarping For Small Farms

University of Maine has produced a new publication called Tarping in the Northeast: A Guide for Small Farms, available at <https://extension.umaine.edu/publications/1075e/>

Cucurbit Grower Survey

This confidential survey seeks to learn about your experiences using row covers and your willingness to adopt a new row cover approach known as mesotunnels. It will support a study is evaluating the use of mesotunnels in the eastern half of the US for control of the full range of pests and diseases on organic production of cucurbit crops. Participation in the survey is voluntary, and your opinion is still valued even if you have not used mesotunnels or row covers.

To participate the survey, use this link: <https://go.iastate.edu/EHWJCH>
Questions? Dr. Sarah Pethybridge, Cornell University, sjp277@cornell.edu, 315-787-2417.

Weights & Measures Farmers Market Scale Update

By Marc Paquette, VT Agency of Agriculture, Food & Markets

The Weights and Measures Section of the Agency will not be holding Farmers Market Scale Clinics this year. Weights and Measures staff will be responding to any consumer concerns regarding scales or accurate weights and addressing these concerns directly at the Farmers Market location referenced. Inspectors may conduct random inspections of markets during normal days and hours of state operation.

Farmers Market Vendors who have

had their scales tested in a prior year are not required to submit their scales to the Agency for inspection. Vendors who may be using new scales for the first time are asked to contact the Agency to make an appointment to have their scales tested for compliance to accuracy and specification requirements. Farmers Market Vendors are asked to license their scales as they would usually do.

To make an appointment to have a scale tested please contact Marc Paquette by email marc.paquette@vermont.gov or by phone 802-793-6744.

Farm First

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was looking for support identifying affordable health insurance. The coordinator offered to do some research and reconnect with Karen for more discussion. They discussed various options for connecting, including phone and video conferencing, but Karen's preference was a visit to the farm, which the resource coordinator was able to arrange. During the first visit they worked together to explore health care options and Karen decided on her next step.

Karen learned that many people who reach out to Farm First connect to more than one resource and appreciated the chance to think about other ways that Farm First might be able to support her. By listening carefully, the resource coordinator came to understand that Karen had lost her health insurance due to a recent divorce, and that Karen was feeling anxious and having difficulty sleeping.

This prompted a discussion about Farm First's free counselling services and Karen learned that many people in her situation find it helpful to talk with a counselor. She was interested in what the coordinator had to say about learning strategies for managing her stress and sleeping better. She had not previously considered speaking with a licensed counselor, but she decided that if Farm First could connect her directly to a licensed counselor who understood farming, that she would give it a try. Farm First then stayed in touch with Karen to make sure that she was advancing with her health insurance application and that the counseling was meeting her needs.

Above is one example, but Farm First can help connect you to an array of resources, such as:

- **Family Challenges:** Relationships, Divorce and Separation, Domestic Violence, Farm Ownership Succession,

Parenting, Aging Parents, and Blended Families.

- **Financial Challenges:** Disaster Relief, Financial Planning, Grants, and Loans.
- **Legal Challenges:** Farm First can connect you with many types of legal support including the Vermont Agricultural Mediation Program (VTAMP), which offers free mediation services to the agricultural community to help resolve disputes before they end up in court.
- **Substance Use Disorders**
- **Mental Health:** Anxiety, Stress, Depression, Grief, Suicide Prevention
- **Mental Wellbeing:** Healthy Thinking, Spirituality, and Resilience

For more information, please contact Karen Crowley by email karenc@farmfirst.org or call Farm First 802-318-5538 (daytime work hours) or 877-493-6216 (after daytime work hours).

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To place a classified ad in *Agriview* sign up to be a paid subscriber — visit our website: <https://agriculture.vermont.gov/administration/vaafm-news/agriview/advertising-agriview>

Email: Agri.agriview@vermont.gov, phone: 802-828-1619. Deadline for submissions is the 1st of each month for next month's issue. Example: January 1st deadline for February issue.

Cattle

Now boarding heifers and beef cattle! If labor's too hard to find or short on feed, let us board your animals. 300 lbs and up, minimum group size of 50; Excellent facilities and feed is mix of haylage and corn silage or straight haylage, your choice. References available upon request. Call 802-533-2984 (2)

Boarding Needed. Barn/pasture for growing year-round cow/calf beef operation located in central-eastern Vermont. If you are looking to improve your dairy margins and you don't want to sell the farm. Also seeking surrogate dairy cows to carry our beef embryos. This is another way to add value to your herd through the raising of a beef calf from the time of embryo transfer through calf raising to 6 weeks of age. Call for more information on our embryo transfer plan. Call 847-702-7812 (3)

Heifers for sale: Angus x, Jersey x, Belgian Blue x, due in May. 2 Dutch Belt ready to breed. Georgia VT, 802-527-2010

Equipment

Bulk milk tank for sale: 1500 gal; DEC; excellent condition, \$8000 OBO. Doda separator-with screens, excellent condition, used very little, \$20,000 OBO. Call 802-533-2984 (2)

Wic Feed Cart 52. In excellent condition, only used for 11 months. For info and pics, call Harold McCoy 802 535 4756 or email labmanvt@gmail.com (3)

H and S- 2 beater self-unloading forage wagon-

1500.00. IH 1086 needs work 4900.00. IH 574 with 2250 bucket, 2100 hours (original) \$11,500.00. Case IH 8312disc bine \$7,000.00. 1st cut organic haylage, early June cut 45.00 a ton. Call 802-537-2435 (3)

Gleaner F2 combine, 4cyl turbodiesel. Runs like a top, sips fuel. New drive and stalk chopper belts, new starter, new rear rubber, various new sprockets and bearings. 15' 315 flex header, and black 4r30 corn head. \$8000 obo. 8" x 60' Buhler farm king grain auger, pto drive, as new, used on only 3500 bu. \$4000obo. Red Jacket electric grain roaster with automatic preheat, empty bin shutoff, and roasted grain crusher on the exhaust end of the auger. Currently set up for soy and works excellent. Less than 24hrs on meter, as new. \$8000obo. Contact Caleb Smith dorsetpeakjerseys@gmail.com. (3)

Gehl HA 1110 Pickup Head, Fitts all Gehl's Good shape- \$ 995.00. Meyers 7400 V Force Spreader. 3 Auger. Like new \$19900.00. New Idea Two Row Picker-Husker \$4800.00. 802-333-4840 (3)

1950 Farmall H good rubber, paint, & rims. 802-592-3356

Hay, Feed & Forage

Excellent quality first cut wrapped round bales; baleage. Shelburne VT Call Andy 802-598-6060. Analysis available upon request.

Organic haylage 12% protein \$45 per ton, 15% protein \$55 per ton. 802-537-2435

4x4 round balage mixed grains cut late June. \$30 802-325-3707

1st cut 4x5 round bales. Don Pettis, 802-265-4566.

Certified Organic First and Second cut wrapped round bales for sale. Clover, Timothy and mixed grasses. Test samples and delivery available. Call Matt at 802-558-3879.

Vetch & rye seeds for sale, mixed in 50 lb. bags, \$1/lb. certified by Vermont Organic Farmers. Thornhill Farm, 198 Taylor Road, Greensboro Bend, VT 05842, todd@thornhillfarmvermont.com, 802-441-3176

2021 First cut \$ 4.00 At barn in Ryegate. Steve, 802-584-4450.

Hay for sale: 1st cut organic round bales. Randolph Center. Call John at 522-8798

Certified organic first cut wrapped round bales for sale – cut by mid-June, good sized and well made. Asking \$50/each with 200 bales available. Beidler Family Farm, Randolph Center Contact: 802-728-5601 or brentbeidler@gmail.com.

Excellent quality first, second, and third cut wrapped round bales for sale. First cut by June 1, dry. \$50.00/bale Please call 802-454-7198

1st, 2nd and 3rd cut haylage and corn silage for sale at the bunk. Call 802-533-2984.

Dry 2nd Cut Hay for Sale 5' round bales, avg. 750 lbs, \$100/bale- Craftsbury, VT 802-624-0539

Certified organic 4x4 round bales for sale. First cut 45.00, second and third 55.00. 802-793-7526

Excellent quality wrapped round bales for sale. \$50/ bale. No emails. Please call 802-454-7198

1st Cut 4 x 4 Wrapped round bales \$45/bale Call Tom at 802-457-5834



1st, 2nd & 3rd cut round bales. 2nd cut square bales, \$6.00 per bale. Volume discount for square and round bales. Call Chris, 802-272-0548.

Certified Organic wrapped round bales. Mid-summer first cut @ \$45/bale and 2nd and 3rd cut @ \$55/ bale loaded at the farm in N. Danville. All hay is tedded and raked and feeds out like dry hay. Definitely not frozen. Perfect for small as well as large ruminates. Email Vince at badgerbrookmeats@gmail.com or call 802-748-8461.

Certified organic wrapped round bales – 1st & 2nd cutting 802-592-3356

400 Wrapped Bales Available. 1st May cut. 2nd June cut. 3rd July cut. \$80 each. Call (802)446-2791/dlc724@gmail.com

4 x 4 wrapped bales, 1st green \$45., dry \$55. 2nd green \$50., dry \$60. Royalton, 802-356-1402 royalvillagefarm@gmail.com

ADDISON COUNTY

1st cut 4x5 round bales never wet. Good horse & cow hay. 802-948-2627 or 802-558-0166

Certified organic, small square bales always stacked and stored under cover, 35-40lbs/ bale. \$4/bale, discounts available for large quantities. 802-989-0781 for inquiries.

Hay for Sale in Addison, VT. Large square bales and small squares. \$50-60 for Large, \$3.50-4.50 for Small. Delivery Available. Call Jack 802-989-8968

Hay for sale. \$3.25 bale. 802-377-5455

1st cut 5ft diameter round bales. \$30-\$35. Orwell, 802-948-2211

Straw for sale - \$7/bale for 50 or more. \$8/bale for less than 50, \$6/bale for all in the barn, approx. 350. from our winter rye harvest in August. certified organic. Thornhill Farm, Greensboro Bend, 05842, todd@thornhillfarmvermont.com, 802.441.3176

Hay for Sale, Cows have been sold. 750 Lb 4X5 round bales stored inside or tube wrapped.

Bedding/Mulch \$35 Heifer/ Beef \$40 Dairy \$55 I will load your truck. In Whiting Call 802-623-6584

Large organic round bales good heifer/dry cow hay \$45/bale call 802-948-2382 evenings

BENNINGTON COUNTY

Corn Silage 1000 ton plus. Haylage 500 ton plus. Round bales 4x4. Square bales small. 802-394-2976

CALEDONIA COUNTY

1st & 2nd Cut Alfalfa mix 600lb Wrapped Hay Baleage. For Questions, Prices and Orders call (802) 375-5647

CHITTENDEN COUNTY

Round bales for horses. Clean first cut timothy mixed grass, quality net wrapped 4' X 5' bales. Never wet. \$45. each. 802- 879-0391 Westford.

15 large 5x5 round bales mixed grass w/some timothy + clover 800+lbs \$50 ea. call 899-4126

FRANKLIN COUNTY

Good Quality Hay 1c & 2c from western US & Canada. Alfalfa orchard & orchard sweet grass 18 to 20% plus protein large bales & organic

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by trailer loads. Large or small square bales of straw whole or processed at farm we load on direct delivery by trailer load. Mountain View Dairy Farm 802-849-6266

Excellent 2021 1st cut hay wrapped round bales for sale. Call Wayne (802) 285-6383

LAMOILLE COUNTY

Organic baled straw. \$5.50/bale. Organic First Cut Hay. \$5.00/bale. Certified Organic. Valley Dream Farm, Cambridge. 802-644-6598. valleydreamfarm@gmail.com.

ORLEANS COUNTY

Pure alfalfa for sale and also 1st, 2nd and 3rd cut big/small squares, round bales, wrapped or unwrapped, straw and switch grass. Call Richard at 802-323-3275.

Organic Certified Silage for Sale: We will deliver from our farm or you can come and pick up. Call for prices and delivery charge. 1-802-744-2444 or 802-274-4934 or 802-744-6553.

North Troy- Good quality Certified organic large round bales, some dry and some wrapped and 9x200

ft ag bags fo haylage. Also conventional large round bales and 9x200 ag bags of haylage. Delivery available 802-988-2959 or 802-274-2832

RUTLAND COUNTY

Good quality 1st and 2nd round bales available, wrapped and dried. Please call 802-446-2435.

WASHINGTON COUNTY

200-4x4 round bales 1st & 2nd cut \$45 each. 802-229-9871

Wrapped, Dry, Round Bales. First, second and third cut. Perfect for horses, goats and cows. Never been wet. \$50/bale. Call 802-454-7198.

WINDHAM COUNTY

1st cut hay. Good horse hay. \$4.50 bale 802-254-5069

WINDSOR COUNTY

Hay for sale-400 square bales, Reading, Windsor County Vt. \$3.50 per bale at the barn. Call 802-484-7240

4x5 dry round bales \$45.00 delivery available. 802-457-1376

Rolling Meadows Farm: square bales in the field or barn \$4.00. Delivery can be

arranged at \$5.50. Very nice hay from fertilized fields in the South Woodstock and Reading area. Call 802-484-5540 or goodfarmvt@gmail.com. Ask for David.

1st. cut dry round bales for sale. Never been rained on, stored

under cover. \$50. @ 1st. cut haylage bales for sale. \$45. Rte. 5 Weathersfield Bow 802-546-4340.

Dry round horse hay, \$50/bale. 200 bales left. Call 802-356-5030.

1st Cut 4 x 4 wrapped round bales \$45/bale, located in South Pomfret, Call Tom at 802-457-5834

Wanted

Patz 16-inch clockwise gutter cleaner chain wanted. 802-645-0865. (12)

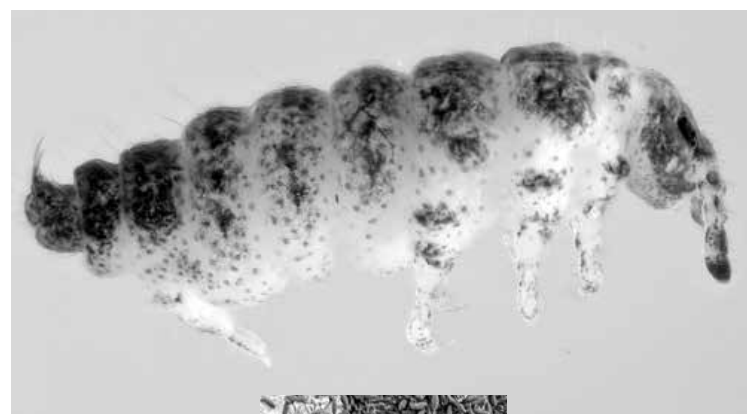
An Introduction to Snow Fleas

By Judy Rosovsky, VT
Agency of Agriculture, Food & Markets

When you are out checking on your sugar tubing or shoveling the recent foot of snow off your deck, look around and see if any tiny but prolific snow fleas are frolicking in the snow with you. Snow fleas, known as springtails, are not fleas, and are no longer considered insects, but they are a remarkable group of creatures with some unusual features.

Snow fleas have a structure called a furcula, which sounds like a Swiss cable car, and has a tail-like body part that is held under the abdomen and when released, propels the snow flea upwards, outwards, and away from potential enemies. Using the furcula takes a lot of energy, so some types of snow fleas have found better ways to avoid predators, such as by living under bark. And some types no longer have furculas.

In addition to the flinging furcula, snow fleas have sticky tubes called colophores. These tubes are thought to play a role in water intake and help the snow fleas adhere to surfaces. Recent flash freeze photography revealed that along with those functions these tubes



Michael Caterino

possibly provide direction for the snow flea spring. Another interesting anatomical note is that they poop when they molt as they shed the lining of their guts and start the next life stage with fresh empty innards.

Springtails were formerly in an insect order called *Collembola*. They are now reorganized into a group that is closely related to insects but more like crabs and lobsters. Although they have 6 legs, they are still considered to be hexapods. Scientists are still fidgeting around about where exactly to place this group, a discussion which will probably not keep most people up nights.

Identifiable remnants of *Collembola* were found in a 410-million-year-old rock, so they have been around for a while. It is thought that they were one of the first arthropods (jointed leg organisms) to move from the



water to the land. They do end up in unusual places: a new species was discovered in a 6,500-foot-deep cave and was coaxed out using cheese as a lure. Another species is found on Mt. Everest. They are right at home on the snow because they have a protein that acts as an anti-freeze and keeps their cells from freezing. Snow flea diets are as diverse as their habitats. They eat leaf litter, live plant material, algae, fungi, other microorganisms like protozoans and nematodes. In the food chain they are both predators and prey. They don't bite, and they play a big role in the ecosystem as detritivores (breaking down detritus like leaf litter). Even though they are small, they show up in large numbers. Next time you see specks of dirt moving in the snow, give them a friendly wave and maybe they'll flip for you.

Agency Contact Numbers

To help you find the right number for your question, please consult the list below. You are always welcome to call our main line 802-828-2430. We will do our best to route you to person most able to answer your question quickly and accurately.

Program Phone Numbers

Act 250	828-2431
Animal Health	828-2421
Business Development.....	828-1619
Dairy	828-2433
Enforcement: Water Quality or Pesticide. . .	828-2431
Feed, Seed, Fertilizer & Lime.....	828-5050
Licensing & Registration	828-2436
Meat Inspection	828-2426
Produce Program.....	461-5128
Vermont Agriculture & Environmental Lab. .	585-6073
Water Quality BMP.....	828-3474
Water Quality Grants	622-4098
Water Quality Reports.....	272-0323
Weights & Measures	828-2433
Working Lands.....	622-4477

Food System Plan

continued from page 6

- employer. This in turn could lead to less turnover and reduced training costs, providing additional financial benefit to the farm in the long term.
- Voluntary certification programs like Milk with Dignity and the Caring Dairy Program, which provide producers with premium in exchange for fair labor standards, can help farms provide a fair wage and dignified working conditions.

Pathways for Employees

Current Conditions

Wages and logistics often determine whether a jobseeker can accept a particular job opportunity. However, workforce development begins long before the job offer, when people become aware of particular careers and

develop an interest in pursuing them. An interested person must then be able to identify necessary skills for that career—both basic work readiness skills and specific technical skills—and affordably acquire them.

Vermont organizations offer a growing number of opportunities to learn about food system careers and gain the skills necessary to succeed in them. Programs like 4-H and Future Farmers of America and educational initiatives such as Proficiency Based Learning, Personalized Learning Plans, and Flexible Pathways allow agricultural learning within the traditional high school system. Vermont's 16 Career and Technical Education (CTE) schools remain one of the best ways for teenagers to access agricultural education. Opportunities after high school are also increasing, both within colleges and continuing education/short courses.

Bottlenecks & Gaps

- Efforts to increase interest among young people are often hampered by exclusion of agricultural careers from career guidance resources, an educational culture that prioritizes desk careers, and parental concerns about the viability of agricultural careers for their children.
- Many food-system employers are interested in working directly with students (in the classroom or through on-site experiential opportunities) but do not have the time and resources to do so.
- Vermont's educational funding model ties funding to each individual student. This disincentivizes high schools from encouraging their students who might be interested in agricultural education to enroll in a CTE school.
- Innovative experiential programs may not be accessible to low-income or otherwise disadvantaged young people. For example, participating in worksite placements for credit requires access to transportation, and post-high school opportunities require the financial resources for program fees and living expenses while the student is un- or under-employed.

Opportunities

- Millennials and Generation Z value meaningful work, and many are drawn to agriculture, caring for animals, feeding their neighbors, working outdoors, or some other aspect of food system work.
- There are national models for alternative credentials and programs that allow an employee to earn an

income while developing skills, or to engage with higher education in a more flexible way. These models include apprenticeships, "stackable" credentials (credentials that build towards a degree but have value individually and can be completed at a flexible pace), and workplace training programs.

- Many farms and food system businesses work closely with educators in their community to increase agricultural literacy, through Farm to School programming and other efforts which can be expanded.

Recommendations

- Workforce support organizations and trade associations should develop a model for sharing services between food system businesses of different sizes. This could improve the efficacy of short-term strategies for filling immediate labor needs (e.g., transportation assistance and seasonal workforce matching) and provide collective employment benefits (e.g., paid sick leave) as well as shared services (e.g., human resources).
- Develop additional affordable and accessible training programs such as apprenticeships, certificates, stackable credentials, and concurrent degrees. Much of this work can be done by individual educational

institutions, for example by Vermont Technical College.

- Train farm and food business advisors to assist their clients with evaluating the cost of turnover and labor shortages and budgeting for the level of compensation needed to attract and retain workers.
- Vermont Agency of Transportation, Regional Planning Commissions, Regional Development Corporations, regional transportation providers, and food system business representatives (e.g., trade associations) should convene annually to identify appropriate solutions for overcoming transportation barriers specific to the food system workforce.
- Farm to Plate Network members, Vermont food system employers, and the Vermont congressional delegation should collaborate to identify adjustments to labor and immigration law that would improve both employers' ability to hire immigrants as well as workplace conditions and wages for those workers.
- Support efforts by Vermont's Career and Technical Education community to redesign the state educational funding model so that CTEs have independent funding streams and budgets and are not in competition with sending schools.

For Immediate Release

The Vermont Agency of Agriculture, Food and Markets have received an application for a Milk Handlers license from the following entity: Coca-Cola Beverages Northeast, Inc., of Rutland, Vermont to process, package, transport, buy/sell and transport milk within the state of Vermont. If anyone has germane information as to why or why not this company should or should not be licensed those comments are to be sent to:

The Vermont Agency of Agriculture Food and Markets
Dairy Section Office
116 State Street, Montpelier, VT 05620-2901

All written comments must be received by April 15, 2022.

At that time the Agency will make a determination as to whether a hearing will be held. If we determine that a hearing is necessary and you wish to attend please write to the above address attention Dairy Section.



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Farms Unite to Share Resources that Fuel Innovation

By Hilary Solomon, Poultney Mettowee NRCD

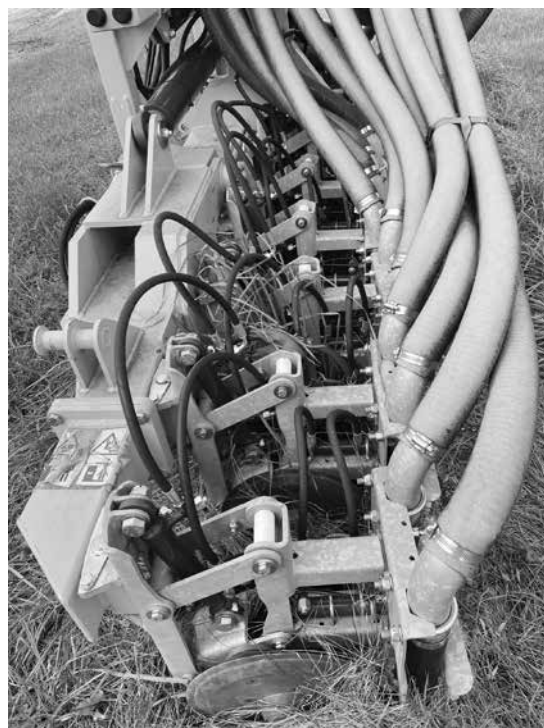
This year, several Mettowee Valley farms—including Southwind Farm, Walnut Hill Farm, and Haystack Farm—worked with the Poultney Mettowee Natural Resources Conservation District (NRCD) and the Vermont Land Trust to create an equipment cooperative pilot project. The group, dubbed the Mettowee Valley Equipment Cooperative, raised money to purchase specialized equipment that might otherwise be prohibitively expensive for a small family farm.

The main goal of the cooperative is to facilitate conversion from conventional to organic grass-based farming techniques, support diversification of organic cropping practices, protect water quality, and protect against climate change, if possible. For instance, specialized equipment can enable the use of row crops on organic farms and can help improve water quality through better manure management and reduced tillage practices. In addition to these environmental benefits, access to pricy equipment can enable small farms to enter into organic dairy farming, produce production, and expand into the creation of other value-added organic products.

One of the most important aspects of this project is its collaborative nature. The new equipment

will be available to a group of farms in the Mettowee Valley that can work together to maximize its utility and share their experience. As the project continues, the cooperative will work with Poultney Mettowee NRCD to maintain the equipment, manage the logistics of the rental program, and track the equipment's use and benefits, with the hopes of demonstrating a successful model for other farm partnerships here in Vermont. As the program develops and becomes established, it will be expanded to include more area farms.

The first piece of



Veenhuis Grassland Manure Injector

equipment purchased by the cooperative, with support from the VAAFM Capital Equipment Assistance Program (CEAP) and

flexibility to manage manure during dry periods, while rotating my herd throughout the summer months.”

Looking to the future,

Vermont Housing and Conservation Board (VHCB) Water Quality Grants, is a Veenhuis grassland manure injector. This injector will support grass-based organic operations in pastures and hayfields and provide a suite of co-benefits including improved air quality, water quality, and soil health. As Jeremy Russo of Southwind Farm explained, “The manure injector will allow me to deliver manure into the soil instead of spread it on top of my pastures, creating much more

the cooperative is excited to explore adding vertical tillage and several cultivators to their offerings. Vertical tillage allows for limited tillage and breakup of sod without the associated compaction, breakdown of soil structure, and water runoff concerns that accompany full tillage. The cultivators provide weed control without the use of herbicides.

The participants of the cooperative hope that their success will inspire similar partnerships around the state, where funders, farmers, and technical assistants such as nonprofits, Conservation Districts, or UVM Extension, work together to raise funds and purchase shared equipment to explore the feasibility of innovative technologies.

Maple Milestone *continued from page 8*

research, demonstration and outreach – enables PMRC scientists to understand first-hand the key questions that matter most to producers and work with them to improve their practices and product.

“We know that the work we do changes practice and increases economic viability. By reaching out and teaching producers about what we’re learning, we can help them make a better life for themselves and a better maple product,” said Perkins.

In more recent years, PMRC’s research focus has

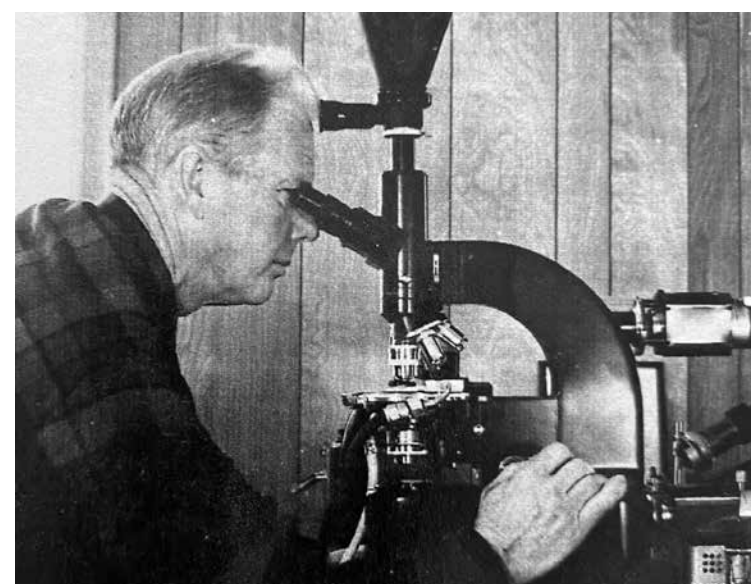
shifted toward high-yield maple production made possible through modern processing technologies and understanding how to mitigate impacts of climate change on yields. Historical records show that already, Vermont’s sugaring season has shifted about a week or more since the 1970s, but many questions remain around how production will be impacted in the longer-term.

“Our work today builds on decades of research of those who’ve come before us,” said Perkins. “We look forward to building on this legacy and helping to advance Vermont’s maple

industry for decades more to come.”

Visit the PMRC’s 75th anniversary [website](#) to learn

more about the University’s pioneering work in maple science.



James Marvin, one of the founders of the UVM Proctor Maple Research Center, conducting maple research circa 1967.

Apply Now for Spring Farm Agronomic Practices

By Sonia Howlett, VT Agency of Agriculture, Food & Markets

The Agency's Farm Agronomic Practices (FAP) Program invests state funds in soil-based agronomic practices to improve soil quality, increase crop production, and reduce erosion and surface runoff from agricultural fields. Grant applications are currently open for spring conservation practices planned to be installed prior to June 30, 2022, such as manure injection (\$25/acre), conservation tillage (\$12/ac), and rotation of cropland into hay (\$30/ac, or \$45/ac if a nurse crop is used). Funding is limited and available on a first-come-first-served basis, so apply now!

There is a maximum

annual funding cap of \$8,000 per farm operation from July 1, 2021, through June 30, 2022. If your farm operation has received the \$8000 cap for fall 2021 cover cropping, then the operation is not eligible to receive any additional spring 2022 FAP payments. Applications are due at least 30 days prior to implementation for all spring conservation practices. We recommend that farmers plan as far ahead as possible for implementation of agronomic practices, especially when seeking financial assistance.

Additional financial assistance for conservation practices are also available through the federal USDA-NRCS Environmental Quality Incentive Program (EQIP). EQIP consistently provides higher payment

rates per acre of conservation practice, so we encourage farms to apply to EQIP before FAP, if feasible.

Farm operations that meet the threshold for the Required Agricultural Practices and are in good standing with water quality regulations are eligible to apply for the specific practice

or practices that they intend to implement. However, farms are ineligible for duplicative payments: farms cannot apply for or receive FAP payment for the same conservation practice(s) on the same field(s) funded under another state or federal agreement.

For more information

on the FAP program, the payment rates for each practice type, and to apply online, go to <http://agriculture.vermont.gov/fap>.

If you have specific questions about practice eligibility, or how the FAP program works, you can contact Sonia Howlett at 802-522-4655.

Upcoming Grant Opportunities

The Agency of Agriculture, Food & Markets is pleased to be able to help you identify upcoming grant opportunities. Please go to <https://agriculture.vermont.gov/grants/calendar> for more information.

Programs Open Year-Round

Farmstead Best Management Practices (BMP) Program

Technical and financial assistance for engineered conservation practices on Vermont farms.

Jenn LaValley
Jenn.LaValley@vermont.gov
(802) 828-2431

Pasture And Surface Water Fencing (PSWF) Program

Technical and financial assistance for pasture management and livestock exclusion from surface water on Vermont farms.

Kaitlin Hayes
Kaitlin.Hayes@vermont.gov
(802) 622-4112

Grassed Waterway and Filter Strip (GWFS) Program

Technical and financial assistance for implementing buffers and seeding down critical areas on VT farms.

Sonia Howlett
Sonia.Howlett@vermont.gov
(802) 522-4655

Conservation Reserve Enhancement Program (CREP)

Implementation costs of vegetated

buffers and rental payments for maintained buffers on Vermont agricultural land.

Ben Gabos
Ben.Gabos@Vermont.gov
(802) 461-3814

Phil Wilson
Phillip.Wilson@vermont.gov
(802) 505-5378

April

Dairy Marketing & Branding Services Grant

Grants for value-added dairy processors to access professional services to implement marketing tactics, brand improvements, and overall strategy

Brockton Corbett
brockton.corbett@vermont.gov
(802) 498-5111

May

Farm Agronomic Practices Program

Per-acre payments for conservation practices on Vermont farms and support for one-time water quality educational events or trainings

Nina Gage
Nina.Gage@vermont.gov
(802) 622-4098

June

Dairy Processor Innovation Grant

Grants for dairy processors to position their businesses for long-term success.

Kathryn Donovan
Kathryn.Donovan@vermont.gov
(802) 585-4571



Reduced tillage planting systems reduce soil disturbance, improve organic matter, and help reduce nutrient runoff from agricultural fields.

MFO Annual Report and Operating Fee Reminder

MFOs must submit an annual report and operating fee of \$1,500 to the Agency of Agriculture, Food & Markets by **April 30 of each year**. A reminder email with 2022 annual report requirements will be sent out in March. Please contact Brittany Cole at 802-522-7413 with questions or to request a mailed copy.

Invoices will be mailed to MFOs in March. Checks for \$1,500 should be made payable to Vermont Agency of Agriculture, Food & Markets and can be submitted to: VAAFM, Attn. Jeff Cook, 116 State St., Montpelier, VT 05620

Apiary Update

By Brooke Decker, VT Agency of Agriculture, Food & Markets

Spring is in the air! As elements of nature begin to wake up from the long winter slumber, beekeepers too are itching to get out into the field to check on their colonies. It's an exciting time, sometimes full of delight and sometimes full of despair. Either way, spring is the time to assess the successes and failures of the previous season's management decisions and



to plan for the upcoming season.

While the temps may hit 50s during the day in April, beekeepers can be tempted to perform management tasks like splits and reversing. Splitting the cluster too early can set the colony back or worse, destroy the vitality of the colony, essentially making the beekeeper's hard work all for naught. Day and nighttime temperatures, colony strength and floral resources are important to consider when making



spring management decisions. Experienced beekeepers in Vermont use the dandelion bloom as an indicator of the ideal environmental conditions for colony splits and reversing. Nighttime temperatures should be above freezing, and colonies should have sufficient population, brood, and nutrition to increase the likelihood of spring colony split successes.

When purchasing bees, always ask the seller for a state-issued health certificate. In Vermont, a health inspection is required prior to the sale of bees. A

state-of-origin is required. This includes packaged bees shipped through the mail as well as nucs, colonies, or packages purchased from neighboring states.

More information can be found on the Agency's Apiary web page <https://agriculture.vermont.gov/public-health-agricultural-resource-management-division/apiary-program>

You may also send questions and requests for information by contacting, Brooke Decker through email AGR.bees@vermont.gov or by phone 802-272-6688.

state issued seller's certificate will be provided to the beekeeper upon completion of the inspection. If purchasing bees from out of state, an import permit accompanied by a valid health certificate from the



This Month's Recipe

Maple No-Bake Cookies

Makes 10 – 12

Ingredients

1/4 c. unsalted butter
1/2 c. pure maple syrup
(preferably Vermont grade B)
2 T. milk
1/2 tsp. maple extract
pinch of salt
1/4 c. peanut butter
1 c. old-fashioned oats

peanut butter and oats.

Drop by tablespoon onto wax paper and allow cookies to cool.

Notes:

Boiling the maple syrup mixture for a full 3 minutes over medium-high heat is extremely important.

Instructions

Combine butter, maple syrup, and milk in a small saucepan. Bring to a boil over medium-high heat. Once at a full rolling boil, set timer and boil for a full 3 minutes, stirring constantly.

Remove from heat and let cool for 2 minutes. Stir in maple extract, salt,

Cookies don't look right? Too thick after stirring in the oats? Add milk one teaspoon at a time. Too soupy? Add more oats at 1/4 cup at a time.

Try replacing almond butter for the peanut butter and vanilla extract rather than maple for a more subtly flavored cookie.

Harvest The Sun

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